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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,748	11/09/2001	Kenji Uchida	NEC-5084-US	5987

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EXAMINER
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NGO, CHUONG D

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,748

Applicant(s)

UCHIDA, KENJI

Examiner

Chuong D. Ngo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1,2,5,8-11,14 and 17-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ozawa (JP 08-101919).

As per claims 1,2,5,10,11 and 14, Ozawa discloses in figure 1, a floating-point to fixed-point conversion having a reference data determining means (11) for detecting a maximum value as a reference, an exponent subtractor and shifting means (12), and a bit extracting means (output of 12) as claimed.

As per claims 8,17, 19 and 20 since the claims is claiming a circuit and method for generating a fix point data, the recitation in claims 8 and 17 that the fixed point data is inputted to a Viterbi decoder and that the fixed point data is utilized in a CDMA system, are mere intended fields of use that do not make the claimed circuit and method distinct from that of Ozawa.

As per claims 9 and 18, the recitation "high decoding rate" is only a relative term. Any decoding rate can be considered high or low with respect to some other decoding rates. The fixed point data extracted from shifting means can be seen as having a high decoding rate as claimed.

2. Claims 3,4,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa (JP 08-101919).

Ozawa does not disclose the detecting a minimum or an average value for the reference as claimed. However, it is clearly equivalent to choose the minimum or the average instead of the maximum for the reference in the conversion of Ozawa. A person of ordinary skill in the art

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would have found it an obvious modification from the teaching of Ozawa to detect a minimum or an average instead of the maximum for the reference as claimed.

3. Claims 6,7,15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa (JP 08-101919) as applied to claims 1 and 10 above, and further in view of Blackham et al (5,619,198).

It is noted that Ozawa does not disclose a correction of an overflow output by representing the output by a maximum value. However, Blackham et al discloses in figure 1, a correction means (30) for correcting an overflow output from a floating-point/fixed-point conversion by representing the overflow output by a maximum value as claimed. It would have been obvious to a person of ordinary skill in the art to provide Ozawa with an overflow correction means as taught by Blackham et al. in order to reduce errors caused by overflow.

4. Claims 1,2,5,8-11,14 and 17-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yoshizawa et al (5,359,548).

As per claims 1,2,5,10,11 and 14, Yoshizawa et al discloses in figure 13, a floating-point to fixed-point conversion having a reference data determining means (20-22)) for detecting a maximum value as a reference, an exponent subtractor means (23), shifting means (24), and a bit extracting means (output of 24) as claimed.

As per claims 8,17,19 and 20, since the claims are claiming a circuit and method for generating a fixed point data, the recitation in claims 8 and 17 that the fixed point data is inputted to a Viterbi decoder and that the fixed point data is utilized in a CDMA system, are mere

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intended fields of use that do not make the claimed circuit and method distinct from that of is a mere intended field of use that does not make the claimed circuit and method distinct from that of Yoshizawa et al.

As per claims 9 and 18, the recitation "high decoding rate" is only a relative term. Any decoding rate can be considered high or low with respect to some other decoding rates. The fixed-point data extracted from shifting means can be seen as having a high decoding rate as claimed.

5. Claims 3,4,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al (5,359,548).

Yoshizawa et al does not disclose the detecting a minimum or an average value for the reference as claimed. However, it is clearly equivalent to choose the minimum or the average instead of the maximum for the reference in the conversion of Yoshizawa et al. A person of ordinary skill in the art would have found it an obvious modification from the teaching of Yoshizawa et al to detect a minimum or an average instead of the maximum for the reference as claimed.

6. Claims 6,7,15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al (5,359,548) as applied to claims 1 and 10 above, and further in view of Blackham et al (5,619,198).

It is noted that Yoshizawa et al does not disclose a correction of an overflow output by representing the output by a maximum value. However, Blackham et al discloses in figure 1, a

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correction means (30) for correcting an overflow output from a floating-point/fixed-point conversion by representing the overflow output by a maximum value as claimed. It would have been obvious to a person of ordinary skill in the art to provide Yoshizawa et al with an overflow correction means as taught by Blackham et al. in order to reduce errors caused by overflow.

7. Applicant's arguments filed 12/22/2004 have been fully considered but they are not persuasive.

It is respectfully submitted since the recitation "predetermined number" does not limit to any particular number, and the numbers of bits output from the shifting means (12) in Ozawa, (24) in Yoshizawa and (28) in Blackham are clearly predetermined numbers (the number of output bits of the shifting means), these numbers of bits can be seen as predetermined numbers of bits extracted from the shifted mantissa parts as claimed. The additional teachings of encoding in Ozawa, addition, subtraction and normalization in Yoshizawa are irrelevant.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chuong D Ngo  
Primary Examiner  
Art Unit 2193

05/04/2005